

REMARKS

Claims 1-17 and 30 are pending in this application. Claims 5, 8, 9 and 12-14 are withdrawn from consideration. By this Amendment, claim 17 is amended to overcome an objection and a rejection under 35 U.S.C. §112, second paragraph. No new matter is added by this Amendment.

I. Claim Objection

Claim 17 was objected to for an alleged informality. In particular, the word "pressure" was misspelled. Applicant has corrected the spelling of "pressure." Accordingly, Applicant submits that this objection is now moot.

Reconsideration and withdrawal of the objection are thus respectfully requested.

II. Rejection Under 35 U.S.C. §112, second paragraph

Claims 17 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, there was allegedly insufficient antecedent basis for "said first rate" recited in claim 17. In order to expedite prosecution, claim 17 has been amended to delete "first" from the recitation in claim 17. As such, Applicant submits that this rejection is now moot and that claim 17 is definite.

Reconsideration and withdrawal of the rejection are thus respectfully requested.

III. Rejection Under 35 U.S.C. §102(b)

Claims 1-4, 6, 7, 10, 11, 15-17 and 30 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by EP 0 950 593 ("EP '593"). This rejection is respectfully traversed.

The Patent Office rejected claims 1-4, 6, 7, 10, 11, 15-17 and 30 relying upon the embodiments disclosed in Figures 22 and 23 of EP '593. In particular, the Patent Office alleges that elements 74, 75, 86, 542, 546, 547, 560 and 562 are equivalent to the flow-rate changing devices recited in claims 1, 2 and 4. Applicant respectfully disagrees.

Before explaining the distinction between the embodiments taught in Figures 22 and 23 of EP '593 and the braking system recited in claims 1, 2 and 4, Applicant takes this opportunity to describe elements 74 and 75 in Figures 1, 22 and 23 of EP '593. EP '593 teaches a braking system including an assisting device 81 which comprises elements 70-78 and control devices 80. See Figure 1 of EP '593.

The assisting device 81 is adapted to boost the drive force to be applied to pressurizing piston 32 of the master cylinder 12. See paragraph 11 and claim 1 of EP '593. The pressurized fluid is delivered from the pump 70 (accumulator 72) into assisting pressure chamber 100 of assisting cylinder 78, but is not delivered into the master cylinder 12 during a normal braking operation. Shut-off valve 108 provided between the assisting cylinder 78 and the master cylinder 12 is closed during an operation of brake pedal 10 (brake operating member).

Thus, the assisting device 81 including the pump 70 and pressure control valve device 82 (pressure increase and reduction control valves 74, 75) is provided to boost the drive force to be applied to the piston 32 of the master cylinder 12, via the assisting cylinder 78 and the brake pedal 10. This is done by controlling the control valves 74, 75 to control the fluid pressure in the assisting pressure chamber 100. See paragraph 19 of EP '593.

However, the assisting device 81 is not provided to change the first rate of flow of the pressurized fluid from the master cylinder 12 into brake cylinder 14, 16, 18, 20 with respect to the second rate of flow of the pressurized fluid into the master cylinder as required in claim 1. Therefore, the assisting device 81 in EP '593 is not equivalent to the flow-rate changing device recited in claim 1.

Furthermore, the assisting device 81 is not equivalent to the switching device of the flow-rate changing device recited in claims 2 and 4. In other words, the assisting device 81 is provided to boost the drive force to be applied to the pressurizing piston 220 of the master

cylinder 12, but not for the selective delivery of the pressurized fluid from the pump 70 into the assisting pressure chamber 224 or pressurizing chamber 222.

Turning now to the embodiment described in Figures 22 and 23 of EP '593, this embodiment includes assisting force control device 538 (see paragraph 147 of EP '593) which includes pump 70, and the elements 74, 75, 86, 542, 546, 547, 560 and 563 referred to by the Patent Office as the alleged flow-rate changing device. The assisting drive force control device 538 is different from the assisting device 81 of Figure 15 described above, in that the assisting drive force control device 538 is connectable to the pressurizing chamber 508, 510, as well as to the assisting pressure chamber 512. However, as described below in more detail, the function of the assisting drive force control device 538 is substantially the same as that of the above described embodiments of Figures 1 and 15 of EP '593.

That is, the elements 541, 546, 547, 560 and 563 are provided for automatic braking operation, braking operation in the event of an electrical abnormality, an abnormality of the valve device 82 (control valves 74, 75), as well as for normal braking operation. See Figure 23 of EP '593. In the normal braking operation (during which the flow-rate changing device is operable, as recited in claim 1), the control valves 74, 75 are controlled to control the fluid pressure in the assisting pressure chamber 512 in the same manner as in the embodiment disclosed in Figure 1. See paragraph 153 of EP '593. More specifically, the pressurized fluid is delivered from the pump 70 (accumulator 72) into the assisting pressure chamber 512 through the control valve 74 and emergency closure valve 560 that are open, in order to increase wheel braking pressure. See paragraph 153 and Figure 23 of EP '593.

When the wheel braking pressure is reduced, the control valve 74 is closed and the control valve 75 is opened while the shut-off valve 542 is opened so that the fluid in the assisting pressure chamber 512 is returned to reservoir 76 through the open control valve 75. At the same time, the fluid in the first pressurizing chamber 508 is returned to the reservoir 76

through the open shut-off valve 542, second pressurizing chamber 510 and fluid passage 522. See paragraph 153 and Figure 23 of EP '593.

Therefore, in the normal braking operation, the pressurized fluid delivered from the pump 70 is not fed into the pressurizing chambers 508, 510 as required in claims 1, 2 and 4. That is, the assisting drive force control device 538 is not provided for selective delivery of the pressurized fluid from the pump 70 (accumulator 72) into the assisting pressure chamber 512 or the pressurizing chamber 508, 510 to change the relationship between the first rate of flow of the pressurized fluid from the master cylinder into the brake cylinder and the second rate of flow of the pressurized fluid into the master cylinder, as required in claim 1, or to change a rate of flow of the pressurized working fluid from the master cylinder into the brake cylinder, which corresponds to a given rate at which the pressurized working fluid is delivered into the master cylinder as required in claims 2 and 4.

Further, in rejecting claims 2 and 4, it appears that the Patent Office alleges that the pressurized fluid is delivered from the hydraulic pressure source 70 into the rear pressurizing chamber 512 when the shut-off valve 546 is closed, or into the front pressurizing chamber 508 when the shut-off valve 546 is open. This allegation is clearly not correct. The shut-off valve 546 is held closed in the normal braking operation, irrespective of whether the wheel braking pressure is increased or reduced. See Figure 23 of JP '593. The assisting drive force control device 538 is never equivalent to the flow-rate changing device including the switching device as recited in claims 2 and 4.

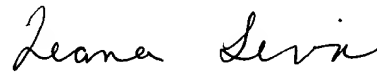
For the foregoing reasons, Applicant submits that EP '593 does not teach or suggest all of the features recited in claims 1-4, 6, 7, 10, 11, 15-17 and 30. Reconsideration and withdrawal of the rejection are thus respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-17 and 30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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